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UGN-6080 AVL User Manual

Table of Contents

1. Introduction 3
2. Specifications 3
3. Features 4
4. Start on 4
4.1 Accessories 4
4.2 Install SIM-card 5
4.3 Descriptions of Connection Ports 5

1. Introduction

UGN-6080 SMS/GPRS GPS AVL is a positioning device which built-in GPS and GSM modules, and applies to fleet management and vehicle security.

2. Specifications

General Specifications
Dimension: 127mm x 81mm x 31mm
Weight: 205g
Main Power Input voltage Range: DC 9V~36V
Power Consumption: Standby- 900mW@DC 12V/888mW@DC 24V
With GPS & GPRS on: 2.28W (190mA@DC 12V)
: 2.16W (90mA@DC24V)
Maximum Input Voltage for 4 Inputs: DC 36V
Open Collector Output Capacity: Max. Current- 250mA
Max. Voltage- DC 60V
Temperature: Operation- -20°C to +55°C
Storage- -40°C to +80°C
Built-in Memory: 2MB Flash Memory
Input Ports: 4 x Input pins
Input1, Input2, ACC (positive triggered); SOS (negative triggered)
Output Ports: 3 x Output pins
Serial Ports: 1 x RS-232, 1 x PS-2

GPS Module Specifications
Model No.: SiRF Star III
Protocol Support: NMEA-0183, SiRF Binary, AI3/F
Datum: WGS-84(default), selectable for other Datum
Accuracy: <10meters at 2D RMS (Autonomous)
Receiver: 20 Channels
Maximum Update Rate: 1Hz

GSM Module Specifications
Model No.: SIM300
Frequency bands: SIM300 Tri-band- EGSM 900,
DCS 1800, & PCS 1900.
The band can be set by AT COMMAND,
and default band is EGSM 900 and DCS 1800.
Transmit power: Class 4 (2W) at EGSM900
Class 1 (1W) at DCS1800 and PCS 1900
GPRS connectivity: GPRS multi-slot class 10
GPRS mobile station class B

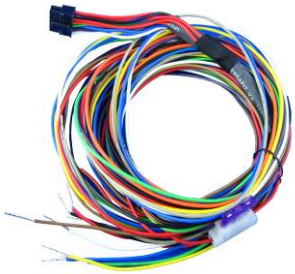
3. Features

1. GSM/SMS/GPRS communication, supports 850/1800/1900 and 900/1800/1900 MHz
2. High performance SiRF star III GPS receiver built-in
3. Interface setup: Get/Set parameter via USB/SMS/GPRS
4. Log/tracking when ACC on
5. Log/tracking every particular time (set from 5~9999sec.)
6. Log/tracking when ACC off
7. SMS/GPRS real-time tracking
8. Emergency tracking
9. Built-in with 2MB flash memory data logger (32,000 times)
10. User password management
11. Backup battery
12. Panic Input port triggered: Notify Control Center & SMS to 3 specific cell-phones
13. Alarm when: Over speed (standard)
14. Alarm when: Towing/abnormal moving (e-68S standard)
15. Alarm when: Vehicle gets inside/outside of Geo-zones (standard)
16. Remote Controller (optional)
17. Alarm when: Ultrasonic sensor triggered (optional)

4. Start on

4.1 Accessories

UGN-6080 & GSM Antenna



UGN-6080 Power cable (Standard)

UGN-6080 GPS Antenna (Standard)

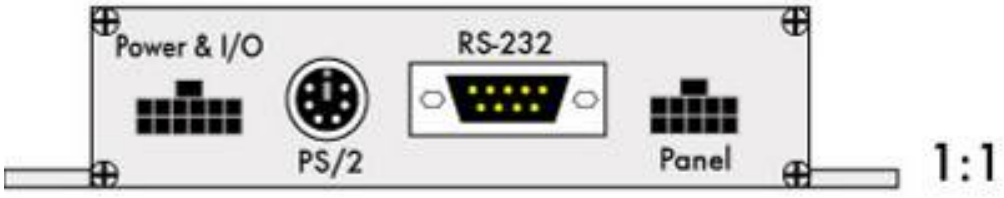
UGN-6080 Installation Components

4.2 Install SIM-card

Please verify beforehand that the SIM card provides GPRS service and release the start pin. (This depends on different countries and telecom companies.)

With the contact face upward, insert the SIM card into the slot of AVL as illustrated in below figures. Align the SIM card with the slot and gently insert it into the slot.

4.3 Descriptions of Connection Ports



1:1

Power & I/O

12	10	8	6	4	2
11	9	7	5	3	1

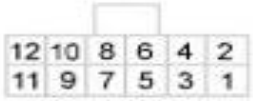
1. VCC
2. GND
3. BAT1
4. BAT2
5. Output1
6. ACC
7. Output2
8. Input3
9. Output3
10. Input2
11. Input1
12. ANT

Panel

10	8	6	4	2
9	7	5	3	1

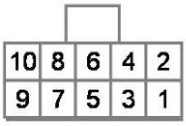
1. VCC
2. GND
3. GPRS
4. Key1
5. GPS
6. Key2
7. SOS
8. Key3
9. PW
10. Key4

Power & I/O



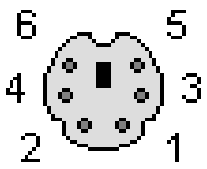
No.	Color of Cable	Definition of Pins	Description
1	Red	VCC	
2	Black	GND	
3	Red	BAT 1	BAT1Battery Jumper
4	Red	BAT 2	BAT2 Battery Jumper
5	Brown	OUTPUT 1	OUTPUT 1
6	Orange	ACC	
7	Yellow	OUTPUT 2	OUTPUT 2
8	Green	INPUT 3	INPUT 3 /SOS
9	Blue	OUTPUT 3	Buzzer
10	Purple	INPUT 2	INPUT 2
11	Gray	INPUT 1	INPUT 1
12	White	ANT	Reserved for transmitter

Panel

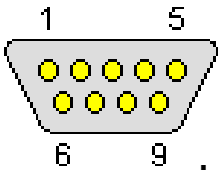


No.	Color of Cable	Definition of Pins	Description
1	Red	VCC	
2	Black	GND	
3	Gray	GPRS	GPRS status indicator
4	Brown	KEY 1	Key 1 status indicator
5	White	GPS	GPS status indicator
6	Yellow	KEY 2	Key 2 status indicator
7	Purple	SOS	SOS status indicator
8	Green	KEY 3	Key 3 status indicator
9		PW	POWER status indicator
10	Blue	KEY 4	Key 4 status indicator

RS232
Baud Rate: 9600
UGN-6080 use Pin No. 2, 3, 5, 7, 8



DB-9 Pin	IDC Internal Pin Name	Name	Dir	Description
1	1	CD	←	Carrier Detect
2	3	RXD	←	Receive Data
3	5	TXD	→	Transmit Data
4	7	DTR	→	Data Terminal Ready
5	9	GND	—	System Ground
6	2	DSR	←	Data Set Ready
7	4	RTS	→	Request to Send
8	6	CTS	←	Clear to Send
9	8	RI	←	Ring Indicator



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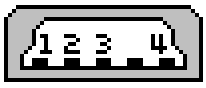
USB:

For Parameter Setting & Configuration



Pin	Name	Cable color	Description
1	VCC	Red	+5 VDC
2	D-	White	Data -
3	D+	Green	Data +
4	GND	Black	Ground